

ABSTRACT OF THE DISCLOSURE

A reconfigurable radio access network architecture can connect a base station with different base station controllers. For example, a connection network can enable direct connection between the base station and a plurality of base station controllers.

- 5 By enabling direct connections between the base station and a plurality of base station controllers, a serving base station controller can be directly connected to base stations in soft handoff with a wireless unit, thereby reducing the differential delays between signals received by the base stations. The reconfigurable access system reduces the need for having additional base station controllers beyond the serving base station
- 10 controller involved in communications with a wireless unit. As such, the complexity of complicated serving base station controller relocation procedures is reduced since serving base stations can communicate directly with the serving base station controller as the wireless unit is serviced by different base stations. Furthermore, the reconfigurable radio access system can provide improved performance and reliability.
- 15 For example, if a base station controller is loaded at a certain level or down, base stations can connect with a different base station controller. The radio access system can use information on the base station controller(s), the base station(s) and/or the wireless unit for which a connection is being established to determine which base station controller to use in connecting with the base station. For example, a base
- 20 station controller assignment system can use an operating parameter(s) and/or measurement(s), such as a traffic load or resource availability parameter(s) in determining which base station controller to assign. Thus, the access network can provide improved load balancing and/or system performance.